TOBACCO CULTURE IN TEXAS.

A Practical Grower Gives Full Directions for Its Proper Cultivation.

Written for The Post.

I have cultivated tobacco in Harris county since 1892, and will try to give my experience in as brief a space as possible.

Tobacco raising is by many considered a difficult and uncertain business and something out of the usual line of agriculture, requiring more than ordinary skill.

Much has been said which has mystified instead of educated the farmer.

When you start to raising tobacco start with the idea that your common sense can not be improved by any amount of ambiguous information. Cultivate your crop and take care of it like you would of anything else you raise; but don't do as a gentleman has done here. He raised two acres of tobacco carelessly, let it sucker, go to seed and let the crab grass get waist high and dried it in a horse stable, where he kept his horse and buggy, cracks and doors all wide open; then tried to sweat it in a horse stable boarded up, and still had, as my correspondent asserts, tobacco of a fine "aroma."

Too much of this is done here and often such stuff finds its way North to some commission house and is sold at auction for Texas tobacco, bringing what it may. Such stuff gives Texas a black eye and it takes years perhaps before that house will be persuaded to even touch anything from Texas again.

THE SEED.

There are as many different kinds of seeds almost as there are countries in which tobacco is raised. The only seed we will concern ourselves about will be Sumatra, the best of wrapper, and Havana, a very superior wrapper, and unquestionably the best flavored cigar tobacco under the sun.

Sumatra is the best wrapper and is quoted today as high as $5 per pound imported direct from the stippers in Sumatra.

Florida raised Sumatra is quoted at from $1 to $1.75 per pound. But to raise Sumatra one must have it tested and know that he has the soil; also the facilities, because it must be raised quick; that is, the plant should be ripe to cut in eight to ten weeks from the time of transplanting.

Hon. Milton Whitney, chief of the division of soils, in Farmers' Bulletin No. 83, page 14, says, in speaking of Florida: "By thus keeping the plants continually and rapidly growing the crop [illegible] matures in forty-five days from the time the plants are set out."

Now while the Sumatra is perhaps the highest type and brings the best prices, Havana is the most reliable and the farmer with his one-horse plow and his negro labor will do better to plant it. Then he will at least be able to produce a good filler, which will find a ready market, while a Sumatra filler is hardly worth raising.

There is a simple way in which a person can reliably test the germinating qualities of his seed—that is by throwing it on a hot stove. All seeds that are good will explode, while the others will simply dry.

Tobacco seed will keep good for years. I have seen seed twelve years old as good and even better than two-year-old seed.

As the seed deteriorates here it is not advisable to raise seed, but buy fresh imported every year, or better, get enough seed for more than one year's sowing.

In the purchase of seed a farmer should be very, very particular as to the source, because while the cost of seed is about 25 cents per acre, it is too great a loss to find at the end of the season that the stuff you have spent so much time and money on is almost worthless. Deal only with old reliable houses whose names are above suspicion.

In buying seed more farmers should get together and purchase a quantity so as to be able to get it cheaper.

PREPARING THE SEED BED.

Choose a warm sheltered place on the farm for the seed bed. If possible take a place a little elevated and protected by woods, shrubbery or buildings. Now take two boards 1x6 and 16 feet long and two boards 1x6 and 6 feet long. Nail them together so that they make a frame six feet wide and sixteen feet long by six inches high. Now take several loads of brush, pile them close on the space selected for the seed bed, set fire to them and burn the brush, making a good heat. The object is to burn all weed seed in the ground and to fertilize the bed. After burning, take a rake and rake off all coal and sticks left. Now take a hoe and hoe, not deeper than two inches, for fear you would get the good top soil covered too deep. Rake this thoroughly and put it into the finest possible tilt. Place your frame and take two tablespoonfuls of seed; mix them with about two quarts of plaster or sifted ashes, and sow evenly over the bed. Roll it down with a roller or press it with a board or pad it with a spade lightly into the soil, but do not cover the seed.

This sowing must be done right after the bed is burned, for the ground must not be allowed to pack before the seed is sown.

Now take some canvas one yard wide. Sew it together in the center and having previously driven some nails through the top edges of the boards from the inside, so that they are now sticking out on the outside about one inch, stretch the canvas over the bed by hooking the edges over the nail points.

The bed will keep moist and will keep the little fly or flea out. When the plants appear and are about half an inch high take a rake with teeth about 3 inches long, covered at the points, and three-eighths inch wide and half inch apart. With this rake across the bed. This will give your remaining plants more room and prevent them dying out just when you want them. For plants too close together are liable to get their root-growth injured, something akin to club-foot in cabbage, and a whole bed will die in one day. After the plants are up it is advisable to dust it or top-dress it with woods-earth or a kind of compost made of chicken manure and muck equal parts; two or three such dressings will impart to your plants the vigor that will sustain them when they are transplanted. The best looking plant is the most liable to grow after transplanting.

Of course some watering has to be done but take good care not to water too much.

The time for sowing the seed is in January, because seed will lay in the ground from three to sometimes six weeks, and it is desired to have good, strong plants before the 1st of April.

Should your seed, by some accident, arrive too late, take your seed, place it in a net of woolen cloth and wrap it in same. Lay it in the oven of your cooking stove when not too hot. Keep it moist and good warm and in from three to four days you can easily mash the seed by pressing them lightly between your finger. Now take them and mix them with your plaster, or ashes, by carefully rolling them through your hand. Be careful that none of the seed stick together, as they sometimes do and become worthless, sickly plants, and there is so much labor lost.

These seeds will come up in a day or two.

Do not let the seed sprout in the cloth, as in mixing you would rub the sprouts off, and thereby ruin them. The plants are ready to set out when from 4 to 6 inches high.

The best soil for Havana tobacco is no doubt a rich sandy second bottom, with a clay subsoil. Our chocolate colored uplands will also produce a tobacco of a fine aroma. I sent some Sumatra plants over the State to some farmers to grow, and am in receipt of some excellent Sumatra from Carmine, Lee county. It was raised on a gray, slaty soil.

A gravelly or sandy soil, with a red or light brown subsoil, is best adapted to the production of sweet and high flavored fillers, while the alluvial and rich flats produce the best wrappers and cigar stock. But tobacco can be grown on all soils in Southeastern Texas.

My advice, therefore, would be for every farmer to try half to two acres, according to his means, to see if he has tobacco land. I advise that amount in order to cure it and see what he has, which he would be unable to do with a smaller quantity than 200 or 300 pounds. I would advise no man to plant more than two acres the first year and the next year he will know more than I could tell him in a week.

TO PREPARE THE SOIL.

Tobacco is a gross feeder, and the old saying that tobacco makes the land poor is only too true. It is therefore necessary to have rich land ready for it, for we want the plant to five to six feet high, and to get ripe in eight to ten weeks.

The best land for tobacco is without doubt the newly cleared timber land along the streams of our State. It is universally admitted that the leaf or vegetable mould contains the very substances in available form that the tobacco needs for its rapid and perfect development.

Commercial fertilizers, while no doubt advantageous to the growth, sometimes ruin the flavor, and the salts contained therein often make the tobacco coal and emit a rank smell. Cotton seed meal is a good fertilizer, but in itself is not sufficient to keep the land in condition. We must do something to bring back or to keep the vegetable mould in the soil, and I have found two crops of cow peas plowed under in one season to improve my land wonderfully.

The rich vegas in Cuba are carefully and systematically handled year after year and the very things which, after a close study, are wanting are replaced and by that means they have been kept up to the present standard. Havard tells us of a time when the Cuban vegas was so carelessly handled, when there was more attention paid to the quantity than to the quality, till they found that it would not do and now they have it down right.

The following is an analysis of the famous tobacco soils of San Diego, Brazil, which produces the finest tobacco, which sells under the same aromatic and is used in Europe, hardly any of it coming to the United States. The other is of the Vuelta de Abajo district, the best of the Cuban tobaccos:

	Vuelto de Abajo. Parts.	San Diego, Brazil. Parts.
Organic matter	9.60	4.60
Silicia	86.40	90.60
Lime	...	40
Alumina	86.40	90.60
Oxide of iron	1.92	1.20
Loss by evaporation	1.40	20
Total	100.00	100.00

Tobacco land should be plowed deep. The first plowing in December or January should be about six or eight inches deep and well done. The second and cross plowing should be done in February and should be at least four inches deep. This procedure will enable your plants to withstand a drouth better than if plowed too shallow.

About eight or ten days before planting out, ridges should be thrown up three feet apart. These ridges are then dragged down again with a board and the ridges are then not over three inches high. This puts the ridges in good tilt to receive the plants and ridges so treated don't dry out so fast in a bad season.

Some throw all sorts of fertilizers in the drill; most, I believe, use cotton seed meal.

For putting in the drill, or broad casting before throwing up hills, I use about 400 or 500 pounds of compost made as follows: Equal parts swampmuck and chicken manure, and the same amount of hardwood ashes unbleached. I work this over once or twice and let it lie till I want it, when it is fine and can be sown broadcast like small grain.

I also use one to two tons of hardwood ashes per acre, but not every year, for fear I would have too much lime and injure the burning qualities of my tobacco. Horse and cow manure mixed equal parts make a good manure. Cow manure alone is too strong. On new ground I would not use manure or any kind of fertilizer the first nor the second year. I have had a good crop of tobacco off of old worn out cotton land. It seems that the cotton extracts from the soil other qualities than are required to raise tobacco.

SETTING OUT PLANTS.

From March 20 to June 1 is the time to plant tobacco, providing the season is all right. But the sooner they are set out the better the crop will be as a rule, and the sooner it will be in the barn, to make room for a second and it for a third crop. Directly after a rain, or preceding some light shower, is the time to set out the plants, and it is then the whole force is called out, for the success of the crop depends in a large measure on the start the little plants get.

Before taking the plants out of the plant bed give it a good watering. This will serve to make the ground soft so that the plants can be pulled up with the roots almost entire. When pulling up plants they should be pulled up one at a time and placed in a basket, then small boys take them to the field and drop the plants on the ridges as follows: Two plants on the first place, then one at a time till every twentieth hill they drop two plants again. The object in laying two plants is the planter picks up one plant, sets it in the proper place, picks up the second and puts it in the next place, when he picks up that plant, etc. The planter will plant much faster this way than when picking up each plant at the respective place.

The second double plants are set near together and are for replanting at the first hoeing, when it is easily done and costs very little. There are different tools for transplanting. Some use a dibble, some the old stick. I use a common 25-cent garden trowel; all hardware stores keep same. It is the best in light, sandy loam, but I doubt if it would work in black land. A good hand and a boy to drop plants can set out one acre a day. There are many kinds of planting machines, but as they are rather expensive and useless for a small acreage, I will leave it to the respective firms to advertise the qualities of their respective machines.

CULTIVATION.

As soon as the plants are set, in about one week after transplanting, cultivate with a single horse, double shovel hoe, or bar, as it is called, with a one-horse plow. But take good care not to get too near to the plants. Then follow the hands with the hoes. They loosen the earth close to the plants. The common cultivator, I think, is better than either of those above mentioned tools, for it pulverizes the land better. I should then go up and back on the same row, cultivating it twice. In a month after I repeat the dose, and that is the last the plants see of hoe or plow, because the leaves of the plants will be too large, and as they are easily broken off and injured it is better to stop.

That the first plowing and hoeing is done close after the transplanting and as soon as the plants are set is very essential. The old saying is, tobacco never grows till after it receives the first hoeing.

WORMING.

Now appears our greatest enemy, the tobacco worm. Five spotted (Sphinx) it is found upon the potatoes, tomatoes and tobacco, but is most injurious to the last on account of its injuring the crop so as to make it almost worthless.

The worm, when it first leaves the eggs, is so small as to be unobserved, but it soon gets to the size of a man's small finger, when it drops off, crawls into the ground, where it becomes a brown chrysalis. Though it looks very repulsive it is harmless and can be picked off with the fingers.

The moth, or miller, is seen flying around towards night and from the noise they make and the way they flit from flower to flower they are often mistaken for humming birds and called in some sections humming birds, moths, hornblowers, millers, etc.

I have captured the miller and put under a glass and next morning counted over 200 eggs laid in one night.

The best way I know to keep this worm in check is the keeping of a flock of turkeys. They will industriously pick all day, and as this worm works on the underside side of the leaf it is easily seen and reached by them.

A better way would be to kill the eggs, or even better yet the moths, but in keeping pans with fire I find that I kill more beneficial insects than moths, and I therefore gave that up and fell back on my turkeys. Of course, I have to pick also, but only twice; once when topping or near topping time and once right before cutting.

TOPPING.

Topping is the taking off of the seed-head and some of the leaves in order to let the strength all go into the production of leaves, as it is leaves and not seed we are. The tobacco is ready to top when it starts to bloom. As some of the plants are not as far advanced as others I generally delay the topping till the largest percentage has some flowers. Others that have no flowers yet will be near it, and all are topped at one time, as topping hastens on the ripening. They get all or nearly all ripe at the same time. There is no regular height to top at. A person must judge his soil and his plants above the topmost leaf, which is six inches long is my practice and they all mature in time.

If a person tops higher he might not get the top leaf ripe in time for the others. In two weeks after topping the plants will be ripe.

At this topping time there are four bottom leaves which will get lost if not taken off now. I have negro boys to break them, put them in baskets and hang them on wire in the barns. It pays well for the trouble.

These leaves are called sandleaves. They should be kept separate and sold separate. They will often bring 5 to 7 cents per pound, but ruin a whole box if mixed in.

SUCKERING.

Suckering is the breaking off of the sprouts that appear above each leaf on the side of the stalks. There are some of these on the plants at the time of topping, but now that the top is taken off they will come on with a vigor almost surprising, and sometimes new ones will start where the old ones were broken off.

I sucker twice—once at the topping, or right after, and once right before cutting the plants. These suckers are dropped right at the foot of the plant and go back to the soil. They should never be saved and the leaves mixed with the tobacco proper, as a purchaser looking at tobacco so mixed would make no offer. Neither can the suckers be left on the stalk in housing, for the leaf when drying hangs close against the stalk and the suckers with their little juicy leaves would keep the leaf moist and make it mildew or house burn.

TOBACCO BARN.

My barn is 96 feet long by 40 feet wide, 20 feet high in the ceiling and 34 in the center. On each side are bends 12x12 feet. In the center they are 12x16 feet; 1x6s, 12 feet long, are nailed every five feet from the ground up, giving me four tiers of hanging tobacco in twenty feet height. These 1x6—12s are nailed crossways in the barn. On the top of these are 2x4—12 feet long, resting with their ends on each side of this bend. These 2x4s are lying loose and placed when the tobacco is being hung. There must be a ventilator on top of this barn, because the heat and moisture must be regulated. Therefore, every third wall-board on the side of my barn is a door; that is, it is swinging on three hinges. I can open either side as I choose, which is very necessary in case of a high wind from east or west. Should a strong wind get into the barn at this time it would be liable to do much damage. The tobacco being dry, would knock together and the farmer would soon find his best tobacco as snuff on the ground.

CUTTING AND HOUSING.

When is tobacco ripe? That is hard to say in so many words. In fact, it can't be said without looking at a ripe plant and at one not ripe.

When tobacco gets ripe, the leaves get thick, pucker up like a spinach leaf, and show yellowish white spots.

When these spots can be plainly seen about ten feet from the plant it is about ripe to cut. In fact, this is generally taken as a sure sign of the right time to cut.

A leaf cut too green will never lose its well known green taste, and a purchaser finding green leaves in a box will price it accordingly.

I would advise the farmer, if he is not sure about it, to let it stand a few days longer. Of course after this stage the leaf deteriorates, but is better than to be green.

Some tobacco farmers press the tobacco leaf with the thumb and finger. If it breaks crisp and short they call it ripe. Should the tobacco get too ripe it will lose its aroma and become thin and flimsy. When ready to cut I take a long-handled hatchet or an old infantry sword is a good thing. I take the top of the plant with my left hand, bend it over till the stock right over the ground is exposed; I then strike it a sharp lick with my hatchet just above the ground. I then drop the stalk gently to the ground without doubling the leaves in under it and leave it there to wilt. In the morning, while the dew is on, I have the worming and suckering done, and as soon as the dew is off I start cutting. I let my tobacco wilt ten or fifteen minutes. Some start cutting in the evening and haul next day; I prefer to haul mine home as soon as possible. When cutting I lay my plants, if possible, with their heads toward the sun. I think they do not sunburn so quick that way. But on a very hot day and on sandy land I have had them burned from underneath. When the tobacco is wilted sufficiently so that it can be handled I have it speared and put on laths in the field and carried to the barn. Those laths are then laid across those 2x4 which I had lying loose (see barn), and the 2x4 are then laid four feet apart, two of them across each bend, leaving three tiers four feet wide. The plants are spaced eight, nine or ten to a lath, small plants of course more, so that they barely touch one another. Great care is necessary to keep the tobacco from sun-burning. From 10 to 3 p. m. the tobacco will burn in ten minutes. After that time it is not so liable to burn, the rays of the sun not being so direct.

The tobacco is speared as follows: A spear point in shape of an Indian arrow, or a round one will do, is made to fit the building lath. The other end of this lath is put in a socket in the hind end of the tobacco frame. Now take the plant in your hand upside down with the right hand holding the thickest part of the stalk, while the left hand holds the stalk about a foot below the right. Now place the stalk against the point of the spear, about six inches from what was the bottom of the plant, and give a sharp jerk. The plant is split in that place and you proceed to the next one. When the lath is full it is taken out of the socket, the spear point is taken off and the lath is placed on a frame, which is on a wagon, or a frame in the field, till the wagon comes. The spear point, of course, is used again and again.

Some farmers prefer splitting the tobacco. They take a knife, split the stalk to within six inches of the ground, then cut it off right above the ground and hang it a-straddle over the lath. They claim the tobacco dried that way cures better and quicker. Others still break the leaves off the stalk and cure the leaves without the stalk. This, I think, is the best, for tobacco cured this way has a better color and is generally tougher and is better liked by cigar manufacturers. I would not advise any one to have tobacco close together after it is drying, because in a rainy season it would be so liable to pole rot or houseburn.

In my next I will treat the second and third crop; also describe the curing, sweating, stripping, bulking, sorting, boxing, baling and marketing. I will also treat the cropmaster, his duties and the benefit received from the employment of such a man, not to one farmer, but to whole communities.

Charles J. Brand,
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A Visit to Houston.

Floresville Chronicle.

A member of the Chronicle staff spent several days in Houston last week in attendance on the Masonic Grand Lodge, and was delighted with his visit to the beautiful city. Houston is growing rapidly in every direction and the improvements being made are of the most substantial character. The streets are nearly all paved and vehicles do not bog on the principal streets as they once did. The street car system is almost perfect, the conductors polite, and a stranger can go anywhere in the city for a nickel. The stores are very handsome and were filled with cash customers all the time. The customers were attracted to the city by the Fruit, Flower and Vegetable Festival, the real estate men's convention, the Tobacco Growers' association, the poultry breeders, the drummers and the Masons. All these were brought to Houston by the enterprise of the business men of the city, except the Masons, and less attention was paid the Masons than to any class or gathering. Houston is the home of the Masons and the people of the city spent nothing to entertain them or keep them there. The writer called at the office of The Post, but Editor Johnston and Manager Palmer were both out working for Houston as well as The Post. A young man at one of the windows invited the country newspaper man to go with a gang of newspaper men down the bayou on an oyster roast; also to attend a banquet at the Hutchins house Wednesday night. Both invitations were accepted, but The Post boys neglected to come for yours truly and he was not present at roll call on either occasion. The Post is a great paper and everybody likes it. During the four days spent in Houston not a man was noticed by this writer who appeared to be in the least under the influence of liquor. Not a man in the Grand Lodge appeared as if he had ever been inside of a saloon. In the 800 or 1000 Masons present not a word was said by any member that could hurt the feelings of another. There was no speech making and every man appeared to be attending to the business for which he was sent there. One member of the lodge was seven feet high and another about four feet, but the [illegible] man did not appear to realize his [illegible] and the little fellow had a stronger [illegible] than the giant. Secretary George [illegible] of the Grand Chapter, is one of the [illegible] pleasant men in Masonic circles. He [illegible] no opposition to a re-election. Neither [illegible] John Watson, as secretary of the [illegible] Lodge. Masonry is flourishing in [illegible] and is doing a great deal of good [illegible] members live up to its great principles. If you do not believe this, investigate [illegible] workings and then you will.

No Chance for the Poor Man.

Brownsville Herald.

No poor man need hope for [illegible] through our new island possessions. [illegible] who have influential friends may [illegible] a paying job in some official capacity, [illegible] no laborer can hope to compete [illegible] cheap labor on any of these islands. [illegible] may be a small demand for skilled [illegible] but the ordinary tin bucket [illegible] not be called into service where [illegible] of the work can be performed by [illegible] are accustomed to live on "two bits" [illegible] or less. None but capitalists will [illegible] through our new possessions, and [illegible] only draw from home [illegible] industrial organizations the [illegible] necessary to sustain them, for [illegible] seeks the cheapest investments [illegible] may increase its returns.